



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,852	03/18/2004	Shoji Kodama	274.43201X00	5856

24956 7590 12/06/2006

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

MAHMOOD, REZWANUL

ART UNIT	PAPER NUMBER
----------	--------------

2164

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental
Notice of Allowability**

Application No.

10/802,852

Examiner

Rezwanul Mahmood

Applicant(s)

KODAMA, SHOJI

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed on 09/01/2006.
2. ☒ The allowed claim(s) is/are 1,2,4-11,13-21 and 23-30.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 20060921 .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


**SAM RIMELL
PRIMARY EXAMINER**

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an in person interview with Mr. Collin Barnitz on 09/21/2006.

The application has been amended as follows:

In claim 1 line 14, the phrase --by instructions-- has been added after the phrase "wherein said storage system is configured".

In claim 1 line 18, the phrase --comparing the new hash value with-- has been added after the phrase "original file is read, or".

In claim 21 line 6, the phrase "is able to store" has been changed to --stores--.

In claim 13 line 1, after claim delete "12" and add --11--.

In claim 23 line 1, after claim delete "22" and add --21--.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:
3. Claims 1,2,4-11,13-21, and 23-30 are pending in this office action.
4. Claims 3, 12, and 22 have been cancelled.
5. The closest prior arts are Shoup (US Publication 2002/0147734), Melahn (US Patent 6,003,042), and Sawdon (US Publication 2003/0158873).
6. Claims 1, 11, and 21 are the pending independent claims.

7. With respect to claim 1, the prior arts made of record do not entirely disclose, make obvious, or otherwise suggest:

“wherein said storage system is configured to determine whether the original file has changed or whether the at least one format converted file has changed by reading one of said files, calculating a new hash value for the read file, and comparing said new hash value with a respective one of said first hash value if said original file is read, or comparing the new hash value with a corresponding second hash value if one of said format converted files is read.”

8. With respect to claim 11, the prior arts made of record do not entirely disclose, make obvious, or otherwise suggest:

“managing a relationship between the original file and the format converted file to

Art Unit: 2164

permit retrieval of either of the original file and the format converted file using an original inode that points to the original file, and by including in said original inode, for each said at least one format converted file, and inode number of a secondary inode corresponding to each said at least one format converted file;"

"using said first hash value to determine whether the original file has changed and/or using said second hash value to determine whether the corresponding format converted file has changed."

9. With respect to claim 21, the prior arts made of record do not entirely disclose, make obvious, or otherwise suggest:

"wherein said file conversion unit is configured to calculate a first hash value of the original file and, for each at least one format converted file, a second hash value corresponding to the format converted file, and

wherein said first hash value is stored in said first inode, and is used to determine whether the original file has changed, and

whether each said second hash value is stored in the corresponding second inode, and is used to determine whether the corresponding format converted file has changed."

10. Because of the missing features in the references mentioned above, independent claims 1, 11, and 21 are allowable. Since claims 2, 4-10 depend on claim 1, claims 13-20 depend on claim 11, and claims 23-30 depend on claim 21, they are also allowable.

Art Unit: 2164

11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



SAM RIMELL
PRIMARY EXAMINER